

## PATENT

Atty. Docket No.: 401-UTL-0 (18528.010)

**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently amended) A method of reducing caloric efficiency comprising peripherally administering to a subject who desires to reduce ~~desires of reducing~~ caloric efficiency an amount of a PYY or a PYY agonist effective to reduce caloric efficiency, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

Claims 2-7. Canceled.

8. (Currently amended) A method of reducing non-high fat food intake comprising peripherally administering to a subject who desires to reduce ~~desires of reducing~~ non-high fat food intake, via a ~~peripheral~~-parenteral route, an amount of a PYY or a PYY agonist effective to reduce non-high fat food intake, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

Claims 9-32. Canceled.

33. (Previously presented) The method of any of claims 1, 8, 34 to 41, 43 to 46, 52 to 53 and 55 to 58, wherein the PYY agonist has a potency in at least one food intake or gastric emptying assay greater than NPY.

34. (Currently amended) A method of reducing food intake comprising peripherally administering to a subject ~~desires of reducing~~ who desires to reduce food intake, via a ~~peripheral~~-parenteral route, an amount of a PYY or a PYY agonist effective to reduce food intake, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, wherein the PYY agonist is a peptide, and wherein the food comprises both high and low fat food.

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35. (Currently amended) A method of reducing appetite for non-high fat food comprising peripherally administering to a subject ~~desireous of~~ who desires to reduce appetite for non-high fat food, via a ~~peripheral~~-parenteral route, an amount of a PYY or a PYY agonist effective to reduce appetite ~~to for~~ non-high fat food, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

36. (Currently amended) A method of reducing appetite comprising peripherally administering to a subject ~~desireous of reducing~~ who desires to reduce appetite, via a ~~peripheral~~-parenteral route, an amount of a PYY or a PYY agonist effective to reduce appetite, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, wherein the PYY agonist is a peptide, and wherein the ~~feed~~-subject's diet comprises both high and low fat food.

37. (Currently amended) A method of reducing nutrient availability comprising peripherally administering to a subject who desires to reduce ~~desireous of reducing~~ nutrient availability, an amount of a PYY or a PYY agonist effective to reduce nutrient availability, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

38. (Currently amended) A method of reducing caloric efficiency comprising peripherally administering, in an amount effective to reduce caloric efficiency, a PYY agonist to a subject who desires to reduce ~~desireous of reducing~~ caloric efficiency, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist has a higher affinity for the Y2 receptor in SK-N-BE2 cells over the Y1 receptor in SK-N-MC cells, ~~in an amount effective to reduce caloric efficiency.~~

39. (Currently amended) A method of reducing food intake comprising peripherally administering, in an amount effective to reduce food intake, a PYY agonist to a subject ~~desireous of reducing~~ who desires to reduce food intake, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor

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greater than those at a Y1 receptor, and wherein the PYY agonist has a higher affinity for the Y2 receptor in SK-N-BE2 cells over the Y1 receptor in SK-N-MC cells, ~~in an amount effective to reduce food intake.~~

40. (Currently amended) A method of reducing appetite comprising peripherally administering, in an amount effective to reduce appetite, a PYY agonist to a subject ~~desirous of reducing~~ who desires to reduce appetite, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist has a higher affinity for the Y2 receptor in SK-N-BE2 cells over the Y1 receptor in SK-N-MC cells, ~~in an amount effective to reduce appetite.~~

41. (Currently amended) A method of reducing nutrient availability comprising peripherally administering, in an amount effective to reduce nutrient availability, a PYY agonist to a subject who desires to reduce ~~desirous of reducing~~ nutrient availability, wherein the PYY agonist is a peptide, and wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist has a higher affinity for the Y2 receptor in SK-N-BE2 cells over the Y1 receptor in SK-N-MC cells, ~~in an amount effective to reduce nutrient availability.~~

42. (Currently amended) The method according to any one of claims 38 to 41 ~~and 53~~ wherein the PYY agonist has a higher affinity for the Y5 receptor over the Y1 receptor.

43. (Currently amended) A method of reducing food intake comprising peripherally administering to a human subject, via a ~~peripheral~~-parenteral route, an amount of PYY or PYY agonist effective to reduce food intake, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the amount comprises about 5 µg to 100 µg per day in a single or divided dose.

44. (Currently amended) A method of reducing food intake comprising peripherally administering to a human subject, via a ~~peripheral~~-parenteral route, an amount of PYY or PYY agonist effective to reduce food intake, wherein the PYY agonist is a peptide,

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wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the amount comprises about 0.1 µg/kg to 10 µg/kg per day in a single or divided dose.

45. (Currently amended) A method of reducing appetite comprising peripherally administering to a human subject, via a ~~peripheral~~-parenteral route, an amount of PYY or PYY agonist effective to reduce appetite, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the amount comprises about 5 µg to 100 µg per day in a single or divided dose.

46. (Currently amended) A method of reducing appetite comprising peripherally administering to a human subject, via a ~~peripheral~~-parenteral route, an amount of PYY or PYY agonist effective to reduce appetite, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the amount comprises about 0.1 µg/kg to 10 µg/kg per day in a single or divided dose.

47. (Previously presented) The method according to any one of claims 1, 8, 34 to 41, 43 to 46, 52-53 and 55-58 wherein the PYY agonist is PYY[3-36].

48. (Previously presented) The method according to any one of claims 1, 8, 34 to 41, and 52 to 53 wherein the amount of PYY or PYY agonist is from about 1 µg to about 5 mg per day in a single or divided doses.

49. (Previously presented) The method according to claim 48, wherein the amount of PYY or PYY agonist is from about 5 µg to 100 µg per day in a single or divided doses.

50. (Previously presented) The method according to claim 48, wherein the amount of PYY or PYY agonist is from about 0.1 µg/kg to 10 µg/kg per day in a single or divided doses.

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51. (Previously presented) The method according any one of claims 1, 8, 34 to 41, 43 to 46, 52 to 53 and 55-58 further comprising administration of a GLP-1, an exendin, an amylin, their agonists, or any combination thereof.

52. (Currently amended) A method of reducing weight gain comprising peripherally administering to a subject ~~desireous of reducing~~ who desires to reduce weight gain an amount of a PYY or a PYY agonist effective to reduce weight gain, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

53. (Currently amended) A method of reducing weight, reducing weight gain, or increasing weight loss comprising peripherally administering a PYY agonist to a subject who desires to reduce weight, reduce weight gain or increase weight loss, in an amount effective to ~~desireous of reducing~~ reduce weight, ~~reducing~~ reduce weight gain or ~~increasing~~ increase weight loss, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a PYY agonist analog ~~and has a higher affinity for the Y2 receptor in SK-N-BE2 cells over the Y1 receptor in SK-N-MC cells, in an amount to reduce weight, reduce weight gain, or increase weight loss.~~

54. (Previously presented) The method according to any one of claims 1, 8, 34 to 41, 43 to 46, 52 to 53 and 55-58 wherein the PYY or PYY agonist is administered by a route of intravenous, intraperitoneal, intramuscular, subcutaneous, topical, nasal or pulmonary inhalation administration.

55. (Currently amended) A method of reducing body weight and food intake comprising peripherally administering to a subject who desires to reduce body weight and food intake, an amount of a PYY or a PYY agonist effective to reduce body weight and food intake, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

56. (Currently amended) A method of reducing food intake comprising peripherally administering to a subject in need thereof, via a ~~peripheral~~ parenteral route, an amount of



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a PYY or a PYY agonist effective to reduce food intake, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

57. (Currently amended) A method of reducing appetite comprising peripherally administering to a subject in need thereof, via a ~~peripheral~~-parenteral route, an amount of a PYY or a PYY agonist effective to reduce appetite, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

58. (Currently amended) A method of reducing nutrient availability comprising peripherally administering to a subject in need thereof, via a ~~peripheral~~-parenteral route, an amount of a PYY or a PYY agonist effective to reduce nutrient availability, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

59. (Previously presented) The method according to any one of claims 55 to 58 wherein the amount of PYY or PYY agonist is from about 1  $\mu$ g to about 5 mg per day in a single or divided doses.

60. (Previously presented) The method according to any one of claims 55 to 58 wherein the amount of PYY or PYY agonist is from about 5  $\mu$ g to 100  $\mu$ g per day in a single or divided doses.

61. (Previously presented) The method according to any one of claims 55 to 58 wherein the amount of PYY or PYY agonist is from about 0.1  $\mu$ g/kg to 10  $\mu$ g/kg per day in a single or divided doses.

62. (Currently amended) The method according to any one of claims 55 to ~~61~~58 wherein the PYY peptide agonist has a higher affinity for either the Y2 or Y5 receptor over the Y1 receptor.

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63. (Previously presented) The method of any one of claims 1, 8, 34-41, 52, 53, and 55-58, wherein the subject is a human.

64. (New) A method of reducing caloric efficiency comprising peripherally administering to a subject having a condition or disorder which can be treated by reducing caloric efficiency an amount of a PYY or a PYY agonist effective to reduce caloric efficiency, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

65. (New) A method of reducing food intake comprising peripherally administering to a subject having a condition or disorder which can be treated by reducing food intake, an amount of a PYY or a PYY agonist effective to reduce food intake, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

66. (New) A method of reducing nutrient availability comprising peripherally administering to a subject having a condition or disorder which can be treated by reducing nutrient availability, an amount of a PYY or a PYY agonist effective to reduce nutrient availability, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

67. (New) A method of reducing appetite comprising peripherally administering to a subject having a condition or disorder which can be treated by reducing appetite, an amount of a PYY or a PYY agonist effective to reduce appetite, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

68. (New) A method of reducing weight, reducing weight gain, or increasing weight loss comprising peripherally administering a PYY agonist to a subject having a condition

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or disorder which can be treated by reducing weight, reducing weight gain or increasing weight loss, in an amount effective to reduce weight, reduce weight gain or increase weight loss, wherein the PYY agonist is a peptide, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a PYY agonist analog.

69. (New) A method of reducing food intake and body weight comprising peripherally administering to a subject having a condition or disorder which can be treated by reducing food intake and body weight, an amount of a PYY or a PYY agonist effective to reduce food intake and body weight, wherein the PYY agonist has pharmacological effects at a Y2, Y5 or Y7 receptor greater than those at a Y1 receptor, and wherein the PYY agonist is a peptide.

70. (New) The method of any one of claims 64-69, wherein the disorder is an eating disorder, a reproductive disorder, obesity, insulin-resistance, hypertension, atherosclerosis, dyslipidemia, cardiovascular risk, stroke, congestive heart failure, gallbladder disease, osteoarthritis, sleep apnea, or diabetes mellitus of any kind.